Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_

202 Chapter 7 Test Review

Solve for x, y, and/or z. Show work. Figures are not drawn to scale.

For #s 1-16, use **exact answers** only. No decimals.

Use geometric mean for #s 1 and 2.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



3. \_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_\_\_\_



6. \_\_\_\_\_\_\_\_ 7. \_\_\_\_\_\_\_\_ 8. \_\_\_\_\_\_\_\_\_ 9. \_\_\_\_\_\_\_\_\_



10. AB = \_\_\_\_\_\_\_ 11. AB = \_\_\_\_\_\_\_

CD = \_\_\_\_\_\_\_ BD = \_\_\_\_\_\_\_

 BD = AC = 10

Classify the triangle acute, right, or obtuse.

12. \_\_\_\_\_\_\_\_\_\_\_\_\_3, 7, 9 13.\_\_\_\_\_\_\_\_\_\_\_\_\_A(0, 4) B (1, 1) C(3, 6)

14. What is the perimeter of an equilateral triangle with a height of 15? (Draw a picture.)

15. What is the height of an equilateral triangle with one side equal to 18?



16. Given the regular hexagon, find UL. DU = 7.

m∠B = 120°



For #s 17-22, round to the nearest tenth.

17. Find the perimeter of the trapezoid to the right.



18. \_\_\_\_\_\_\_\_\_ 19. \_\_\_\_\_\_\_\_\_\_ 20. \_\_\_\_\_\_\_\_\_\_\_

21.\_\_\_\_\_\_\_\_\_A 15ft ladder is place against a building. It needs to reach a height of 9ft. At what angle should it be placed with the ground?

22.\_\_\_\_\_\_\_\_\_A lighthouse watchman observes two sailboats east of the lighthouse. The angles of depression to the two boats are 34° and 55°. The height of the lighthouse is 90ft. What is the distance between the boats?